



Rocky Mountain
Remediation Services, L.L.C.
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INSTRUCTION

INVESTIGATIVE DERIVED MATERIAL DISPOSAL PROJECT TRENCH 1

RMRS/OPS-INSTR.032

Revision 0

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Name, Title

1.0 PURPOSE

This work instruction (WI) provides ordered operations that must be performed during the processing of IDM waste drums for on-site disposal into Trench 1. These drums consist of the remaining drums that have not been shipped to USA Waste or NTS for disposal.

2.0 SCOPE

This WI applies to all activities associated with the IDM Trench 1 (T-1) Waste Disposal Project. The areas covered are the D903 Decontamination Pad, the Contractor Yard Area 905, the T-1 area and marked off road areas.

NOTE:

This WI is organized into sections applicable to the overall job (i.e. prerequisites, personnel training, safety notes, etc.). The job will be conducted most efficiently using an assembly line approach. The actual instructions are presented in modular format broken down into sets of tasks. Example modules are: drum movements, decanting free liquids from type B drums, transfer of drums from 905 yard to T-1, dumping drums and segregating waste and disposition of drum carcasses. Depending upon weather conditions, either of the Job Supervisors may conduct activities under one or more of the modules on any given day. It is the express purpose of the WI to specifically provide this degree of flexibility to the Job Supervisor.

This document reflects the recommendation of various scientific and engineering personnel along with experienced craft workers to initiate the job. However, responsibility for adapting the work strategy to address changing field conditions and achieving success lies with the Job Supervisor.

3.0 PREREQUISITES

3.1 PERSONNEL

3.1.1 JOB SUPERVISOR

- Conduct pre-evolution briefings (PEBs) and job task briefings (JTBs) as outlined in COOP for all personnel as follows:
 - ◇ For operators and field support personnel at the beginning of each shift, or when a relief work crew is to take over and continue the job.
 - ◇ For those participants arriving late or after work is in progress.
 - ◇ When a new equipment configuration is to be used or there has been a significant change in the job strategy.
 - ◇ For a restart of operations after a shutdown or pause.
 - ◇ The pre-evolution briefing may include refresher review of this WI and other project work control documents such as Operations Order, OO-SWO-004, “Handling Drums and Pallets in Poor Condition and Response to Spills of Investigative Derived Material (IDM).”
- Conduct safety meetings during the PEBs/JTBs and encourage operator feedback on safety issues. Denote on the comment section of the PEB forms all safety concerns. Following the pre-evolutionary briefing, forward these safety concern comments to the Project Manager.
- Obtain written authorization from the Project Manager to initiate operations at the beginning of the project and after a shutdown.

3.1.2 TRAINING COORDINATOR

- Verify all personnel assigned to participate in project activities covered by this WI maintain their qualifications. The assigned Supervisor and mission support personnel involved in processing IDM B for disposal in Trench 1 must maintain qualification in Industrial Truck Safety Training. In addition, if material is not permitted for free release, Personnel will require Radiation Worker II and Waste Generator.

- Develop a Training Implementation Plan.
- Provide a List of Qualified Individuals (LOQI) per RMRS INST.004.

3.1.3 ALL PERSONNEL (participating in activities covered by this WI)

- Complete all training required by the Training Coordinator.
- Complete a briefing on this WI before commencing.

NOTE: IF THE FOLLOWING DOCUMENTS PRESCRIBE CONFLICTING PPE REQUIREMENTS, THE MOST RESTRICTIVE PPE SHALL BE USED.

- All personnel assigned to the project shall wear the following PPE when working:
 - ◊ Current Dosimeter [when required by Radiation Work Permit (RWP) or Radiological Postings].
 - ◊ Personnel protective equipment (PPE) required by the RWP associated with the task.
 - ◊ PPE required by the Activity Hazard Analysis (AHA) associated with the task.

3.2 APPROVALS & DOCUMENTATION

3.2.1 PROJECT MANAGER

- Verify the WI, AHA, and RWP approvals if necessary, are completed and granted BEFORE initiating operations.
- Verify drums have been segregated and marked appropriately prior to decanting and staging.
- Maintain "T1 Dump" file for tracking IDM drums by recording date drum was loaded on truck to be transported to T-1. Distribute copies to the WEMS Coordinator and Project Manager.

3.2.2 JOB SUPERVISOR

- Copies of the following documents shall be available at the job site and available upon demand for inspection if necessary:
 - ◊ AHA's
 - ◊ LOQI
 - ◊ RWP's

- ◇ Database listing drum numbers for processing
- ◇ "T1 Dump" file for recording date drum was loaded into truck.

4.3 FACILITY & EQUIPMENT

4.3.1 JOB SUPERVISOR

- Confirm radios or other acceptable communications equipment are present.
- Confirm sufficient quantities of the following equipment are present at the work site:
 - ◇ Forklifts
 - ◇ Decanting equipment, liquid accumulation drums/crates/tanks/tankers
 - ◇ PPE
 - ◇ Safety supplies required by AHA's
 - ◇ Drum grabbers, hydraulic or mechanical
 - ◇ Sawsall
 - ◇ Metal band cutters/snips
 - ◇ Drum tipper
 - ◇ Hammer and punch
 - ◇ Electric impact wrench
 - ◇ Pallets in good condition
 - ◇ Web cinch straps
- Verify scheduled activities are entered on all applicable Plan of the Days (POD's), including those covering the D903 Decontamination Pad, the Contractor Yard Area 905, 904 Pad tents and T-1.
- Verify the drum tippers and the drum crusher are inspected daily prior to use:
 - ◇ Hydraulic hose fittings show no signs of leakage
 - ◇ Tipper batteries have a fresh charge
 - ◇ Tipper control pendant wiring insulation is not frayed
 - ◇ Tipper drum clamp hinges are free from cracks

5.0 INSTRUCTIONS

Each subsection represents a module or set of related tasks that may be performed independently from other modules. Unless otherwise stated, tasks may be performed in a different order or concurrently.

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5.1 Drum Movements Module

NOTE: Type B drums will be identified, segregated, and staged for venting and decanting operations at the IDM storage site. This activity will not be required if approval is obtained to place the entire population of IDM drums into Trench 1.

5.1.1 Within the project scope, IDM soils and other generated containers may be moved and temporarily staged in any of the following areas:

- T-1
- Contractor Yard Area 905
- Decontamination Pad D903
- 904 Pad Tents
- Roadways connecting above listed areas (no staging in roadways unless road has been secured)

NOTE: TRAFFIC CONTROLS MUST BE INSTITUTED TO AVOID COMMINGLING OF MOTOR VEHICLES AND FORKLIFTS CARRYING IDM SOIL CONTAINERS

5.1.2 The Job Supervisor shall review general travel routes at the start of each work shift or when a new crew is assigned.

5.1.3 All personnel shall comply with Operations Order, OO-SWO-004, “Handling Drums and Pallets in Poor Condition and Response to Spills of Investigative Derived Material (IDM).”

5.1.4 All personnel shall make an ongoing effort to keep travel pathways clear and free of debris and unused pallets. Damaged or excess pallets shall be stacked no more than six feet high and banded, time permitting, in areas outside forklift travel routes.

5.1.5 If poor ground conditions make forklift travel dangerous, means such as plywood or steel sheets may be used to improve traction and safety.

5.1.6 A spotter is required at all times when picking-up or placing a load if required by the work crew at the pre-evolutionary briefing.

5.1.7 Before crossing a vehicular traffic roadway, stop, and check both directions for traffic before proceeding, ensure a spotter is present, and traffic signs are posted.

5.1.8 Periodically check positioning of drum grabbers on drums and forklift tines on boxes while traveling distances over uneven ground.

5.2 Decanting Free Liquids from Type B Drums

- 5.2.1 Vent the drum in the Contractor Yard prior to loosening the bolts on the drum ring by punching a hole on the top portion of the drum side just under the locking ring.
- 5.2.2 Remove the lid from the drum.
- 5.2.3 If no free liquids are visible, transport the drum with the lid placed securely and ring/bolt assembly reattached to staging area for transport to T-1. Mark the drum with the word “Good” signaling the drum is ready for transport.
- 5.2.4 If drum contains free liquids, replace the lid and ring/bolt assembly, and transport the drum with secured lid to the 904 Pad south end for indoor processing.
- 5.2.5 Drums will be decanted utilizing a hydraulic or electric drum attachment on a forklift. Water will be removed by pouring into a decant water accumulation container to be emptied at the 903 Decon Pad. Minimize uptake of solids as much as possible.

NOTE: A PERSON SHALL BE STATIONED AT THE DECANT WATER ACCUMULATION CONTAINER AT ALL TIMES DURING FILLING TO PREVENT OVERFLOW FROM THE ACCUMULATION CONTAINER.

NOTE: Contact the Job Supervisor if decant water is released to the environment.

- 5.2.6 At the end of each shift, consult the Job Supervisor for direction on stowing the decanting equipment in a location to minimize impacts to other anticipated operations.
- 5.2.7 Replace drum lid and ring/bolt assembly.
- 5.2.8 Stage drums in designated area after decant pending transfer to T1 for disposal.

5.3 Transfer of Drums from 905 Yard/904 Tent to T1 Module

- 5.3.1 Make arrangements with T-1 Manager for scheduling of trucks and Solid Waste Operations Supervisor to support vented and decanted drum transfer from 905/904 to T-1 on a daily/weekly basis.
- 5.3.2 Palletize drums using cinch straps to band horizontally and vertically per the T1 Banding/Palletizing Plan approved by onsite Traffic Department (10/21/98).
- 5.3.3 Concurrently with step 5.3.2, verify drum numbers against inventory.

- 5.3.4 Complete an ITR (Internal Transfer Receipt) for drums to be loaded and transferred to T-1. (Required if onsite Transportation is used.)
- 5.3.5 Mission support personnel will load vented and decanted drums onto a truck using fork lift for transfer to the T-1 site.
- 5.3.6 Mission support personnel will individually unload drums at T-1 transporting via forklift into the tent structure.

5.4 Dumping Drums and Segregating Waste Module

- 5.4.1 Mission support personnel will dump contents of drums using forklift and drum tipper on the ground surface near the existing soil stockpile.

WARNING: If the action level for CO (12.5 ppm) is reached, the initial action will be to shut off equipment to allow the CO to dissipate and personnel will be directed to move to the open doors for fresh air until the CO dissipates. Refer to the Trench-1 Investigatively Derived Material (IDM) Placement AHA (10/98) for further actions if level of CO is reached more than twice during the day.

- 5.4.2 Mission support personnel will segregate plastic liners and bags, rigid liners, polyvinyl chloride (PVC) pipe and metal drum carcasses from the IDM material.
- 5.4.3 Mission support personnel will crush drums pending disposal decision options and size reduce rigid liners.

5.5 Disposition of Drum Carcasses Module

- 5.5.1 Materials separated will be staged for further processing. If free released, materials will be shipped to USA Waste landfill as sanitary waste.
- 5.5.2 If no free release, materials will be size reduced and containerized for disposal at NTS.

6.0 RECORDS

“T-1 Dump” file will be handled in accordance with RMRS Administrative and Records Management Procedures.

7.0 REFERENCES

- 00-SWO-004, Handling Drums and Pallets in Poor Condition and Response to Spills of Investigative Derived Material
- 3-PRO-140-RSP-09.03, Unrestricted Release of Bulk or Volume
- 1-PRO-Q11-1221, Controls for Updating Waste Package Information in WEMS
- RMRS INST.004, Preparation of LOQI
- Procedures, Training and qualification Task Analysis
- MAN-066-COOP, Site Conduct of Operations Manual